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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,725	04/16/2001	Ellen O. Aeling	55788US003	7044

32692 7590 07/29/2003

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EXAMINER

WATKINS III, WILLIAM P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 07/29/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application N .</b> 09/835,725	<b>Applicant(s)</b> AELING ET AL.	
	<b>Examin r</b> William P. Watkins III	<b>Art Unit</b> 1772	

-- The MAILING DATE of this c mmunication appears on the cover sheet with the correspondence address --

**Peri d for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 May 2003 .
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disp sition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

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|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

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### DETAILED ACTION

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 9-16, 19-25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andriash (U.S. 5,939,168) in view of Ross (U.S. 5,830,529) or Detiker (U.S. 3,694,945) or Whitehead et al. (U.S. 6,079,844).

Andriash teaches a perforated film with an opaque back layer with the perforations being 10-68% of the area of the film with use of a back adhesive layer (15a) being an option (claim 1, col. 6, lines 10-35). A back light may be used (col. 3, lines 10-25). Whitehead et al. teaches the use of a reflective surface on the back of a backlit sign cover layer in the areas that are not transparent to light in order to increase luminance brightness (abstract). Detiker teaches the use of a reflective layer on the back of an opaque grid which forms passages through

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which light exit through the front of a sign in order to maximize the amount of light that illuminates the sign (col. 3, lines 40-60). Ross teaches the use of a reflective surface on the opaque areas of perforated cover, the reflective layer being next to the illumination source (col. 46, lines 50-60). The instant invention claims a panel with 10 to 35% perforated area that reflects at least about 50% of the light incident on the back of the laminate. It would have been obvious to one of ordinary skill in the art to select 10 to 35% from the range given by Andriash and use a back adhesive layer as these are taught options in the reference. It further would have been obvious to one of ordinary skill in the art to make the adhesive or other back layer of Andriash that faces the backlit illumination source, reflective, in order to maximize the amount of light that is transmitted through the sign face surface because of the teachings of Whitehead et al. or Detiker or Ross.

3. Claims 8, 17-18, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andriash (U.S. 5,939,168) as modified above as applied to claims 1-7, 9-16, 19-25, and 28 above, and further in view of Logan et al. (U.S. 5,954,423).

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Andriash as modified above teaches the use of an inner reflective layer. Logan et al. teaches the use of a white layer as a reflective layer in a sign cavity (col. 7, lines 1-10). The instant invention claims the use of a white reflective layer. It would have been within the ordinary skill of the art to have used a white layer as the reflective layer of Andriash as modified above in order to have an effective reflective layer because of the teachings of Logan et al.

4. Applicant's arguments with respect to claims 1-28, filed 14 May 2003, have been considered but are not persuasive.

Applicant argues that the purpose of Andriash would be destroyed if modified as noted in the above rejection. The examiner disagrees. The rejection above calls for the adhesive layer of Andriash to be made reflective. Andriash teaches in col. 6, lines 20-35, that the opaque layer with applied adhesive layer is perforated after the application of the adhesive layer, before the construction is applied to the nonperforated transparent or translucent layer with the second image. Thus a reflective adhesive layer would not destroy the function of the nonperforated layer, since light would pass through the holes in the adhesive layer and not be reflected. This is the same as

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the instantly disclosed structure in Figure 7, where element 84 is a nonperforated transparent layer under a perforated construction (element 82).

Applicant again argues that there are unexpected results of the claimed 10% to 35% area perforation over the broader range taught by Andriash. The working examples in the specification only teach a 21% area perforation (page 13, lines 25-33). There is no indication that the broader hole range of Andriash, if made reflective, as taught by the combination, would not have similar results. Unexpected results must be shown in regards to the closest prior art. The closest prior art references, which teach reflective back surfaces in signs, are the secondary references, Ross, Whitehead et al., and Detiker. There is no comparison in the specification of the amount of light reflected by the instant invention in comparison to any of the secondary references. The comparison examples in the specification all have back surfaces, which are not reflective.

Regarding the rejection using Logan, applicant argues that there is no teaching of a black film in combination with a white film in Logan. The examiner only relies on Logan for the teaching of white as a reflective layer. The other references in the combination provide the structure of an opaque layer

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(which may be black) and a reflective back or adhesive layer.

Logan only provides motivation to make this reflective layer white.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Watkins III whose telephone number is 703-308-2420. The examiner works an increased flex time schedule, but can normally be reached Monday through Friday, 11:30 A.M. through 8:00 P.M. Eastern Time. The examiner returns all calls within one business day unless an extended absence is noted on his voice mail greeting.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



WW/wow

July 27, 2003

**WILLIAM P. WATKINS III  
PRIMARY EXAMINER**